# SEB FLORENCE 2018 3-6 JULY 2018 FIRENZE FIERA CONGRESS AND EXHIBITION CENTRE

SEBIOLOGY.ORG #SEBAMM

# MASTERS OF BIOLOGY

SESSION TOPICS WILL INCLUDE:

#### SCIENCE ACROSS BOUNDARIES - ANIMAL, PLANT AND CELL BIOLÓGY

ENVIRONMENTAL IMPACT ON EPIGENETIC MEMORY (PLANT AND ANIMAL BIOLOGY)

#### STRESS: FROM CELLULAR MECHANISMS TO ORGANISMAL RESPONSES AND CONSERVATION

- (ANIMAL AND CELL BIOLOGY) • PUMPING IONS AS A RESPONSE TO STRESS FROM AQUATIC HABITAT TRANSITIONS: CELLULAR AND MOLECULAR MECHANISMS RELATED TO EVOLUTIONARY CHANGES
- THE ROLE OF THE MITOCHONDRIA IN ENVIRONMENTAL ADAPTATION AND DISEASE
- ADVANCES IN NON-INVASIVE MONITORING OF STRESS IN THE FIELD AND LABORATORY: APPLICATIONS FOR CONSERVATION

GENERAL CELL AND PLANT BIOLOGY (CELL AND PLANT BIOLOGY)

# ANIMAL BIOLOGY

#### BIOMECHANICS

• BIOMECHANICS AND CLIMATE CHANGE • OPEN BIOMECHANICS

#### PROXIMATE AND ULTIMATE DRIVERS OF BEHAVIOUR

- GENERALITY OF THE 'PACE-OF-LIFE SYNDROME' CONCEPT: IS THE IDEA OF INTEGRATED SYNDROMES
- SUPPORTED BY EXPERIMENTAL DATA? • INTRASPECIFIC VARIATION
- IN RESPONSES TO STRESS: WHY INDIVIDUALS MATTER?
- THE ROLE OF INDIVIDUAL VARIATION IN THE BEHAVIOUR OF ANIMAL GROUPS

#### THERMOBIOLOGY

- CARDIO-RESPIRATORY ADAPTATIONS TO ENVIRONMENTAL CHANGE
- MITOCHONDRIA IN CHANGING CLIMATES: BIOSENSORS AND MEDIATORS OF ANIMAL DESULT
- MEDIATORS OF ANIMAL RESILIENCE • OCEAN WARMING AND ACIDIFICATION: WHAT UNDERLYING MECHANISMS CAN REVEAL ABOUT IMPACTS OF MULTIPLE STRESSORS

# • OPEN ANIMAL BIOLOGY SESSIONS

### PLANT BIOLOGY

- CLIMATE CHANGE IMPACT ON URBAN AND NATURAL FORESTS
- ENHANCING PLANT PHOTOSYNTHESIS
- WITH BIOPHYSICAL CO<sub>2</sub> CONCENTRATING MECHANISMS
- FROM GENOME TO GENOMES
- MORPHOGENESIS IN NON-FLOWERING PLANTS
- PLANT BIOTECHNOLOGY FOR HEALTH AND NUTRITION
- PLANT TEMPERATURE RESPONSES: SHAPING DEVELOPMENT AND ENHANCING SURVIVAL?
- SHAPING ROOT ARCHITECTURE - FROM NUTRIENT SENSING AND TROPISMS TO SYSTEMIC SIGNALS AND DECISION MAKING

## CELL BIOLOGY

- FUNCTIONAL ORGANISATION OF THE NUCLEAR PERIPHERY
- GREEN MICROBES
  SEQUENCING FROM LAB TO FIELD
- AND THE POST GENOMIC ERA
- SYSTEMS ANALYSES OF MULTICELLULARITY COMPLEXITY AND ORGAN BIOLOGY
- QUANTITATIVE SYNTHETIC BIOLOGY

#### SEB+

- TEACHING BIOLOGY AT DIFFERENT SCALES: CHALLENGES,
- OPPORTUNITIES AND STRATEGIES • CAREER DEVELOPMENT WORKSHOPS FOR YOUNG RESEARCHERS
- DIVERSITY DINNER
- EMBRACING YOUR ANIMAL CARE, WELFARE AND USE COMMITTEE -A WIN-WIN SITUATION
- MEET THE ACADEMICS